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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/833,674
Filing Date: April 13, 2001
Appellant(s): YAMAZAKI ET AL.

Hussein Akhavannik
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 7, 2008 appealing from the Office action mailed May 25, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,675,538	Ritter	2-2003
6,327,376	Harkin	12-2001
6,175,922	Wang	1-2001
6,040,810	Nishimura	3-2000
5,550,066	Tang et al.	8-1996

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 6-9, 12, 35, 38, 43, 46, 51-53, 56-59, 62, 85, 88, 93 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,657,538 to Ritter (a reference of record) in view of US 6,327,376 to Harkin (a reference of record) and US 6,175,922 to Wang (a reference of record).

Regarding claims 1 and 51, Ritter discloses a system for identifying an individual and a portable information device (col. 4, lines 16-27), comprising: a display device (column 4, line 25-32); means for checking read biological information with reference biological information (column 4, line 32-52); and means for transmitting information about the matching to a destination of communication (col. 5, lines 9-48) only when the read biological information has

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matched the reference biological information (col. 4, lines 40-48, Ritter teaches if the biometrics are not authenticated, usage may be prevented such as turning the phone off.).

Ritter does not disclose the display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user or the light-emitting element comprises a cathode, a light emitting layer and an anode. Harkin discloses an electronic apparatus comprising fingerprint sensing devices constructed using transparent sense electrodes and combined with a flat panel display device such that fingerprints are sensed as the user is interacting with the display (column 9, line 14-63). Harkin further discloses the fingerprint sensor and the thin film components required for the array may be fabricated directly on the surface of the upper plate of the display (col. 9, lines 37-40) and the sensor array and the display element array are related and row and column conductors in the sensor array are aligned with the row and column conductors in the display element array (col. 9, lines 47-63), thus the display device is construed as having pixels including a light emitting element and a sensor for reading biological information. Regarding the light-emitting element comprising a cathode, and light emitting layer and an anode, Harkin discloses the display device may be an electroluminescent display, which inherently is comprised of these elements. It would have been obvious to one of ordinary skill in the art at the time the invention was made to read biological information of a user by means of a display as taught by Harkin in order to dispose the sensing device over a display while still allowing the output of the display to be viewed for use in the field of portable electronic products using displays such as mobile phones, smart cards, personal digital assistants (PDAs), and other portable computers while avoiding the need for a larger casing or sacrificing

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an area of the casing that could otherwise be used for other purposes (Harkin, column 4, line 8-35).

Ritter does not explicitly disclose judging legitimacy of the user by checking read biological information with the reference biological information or transmitting information about the judgment to a destination of communication. Examiner notes “legitimacy” is being interpreted as meaning “authorization” or “authorized” as agreed upon during the in person interview conducted on November 14, 2006. Wang teaches a portable authorization device comprising: a means for judging legitimacy of the user by checking read biological information (col. 6, lines 40-57; col. 11, line 61 – col. 12, line 6; col. 16, lines 20-34); transmitting information about the judgment to a destination of communication (col. 5, lines 30-39; col. 6, lines 40-57; col. 7, lines 12-24; col. 11, line 61 – col. 12, line 6; col. 16, lines 20-34, Wang teaches approval requires the device to determine whether the user has proper access to the device through identification such as biometrics, therefore the transmitted approval information inherently indicates the judgment that that the user is legitimate.). The teachings of Ritter and Wang are combinable because they are both concerned with portable devices for identifying an individual through read biological information. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system and device taught by Ritter to include a means for judging the legitimacy of the user; means for transmitting information about the judgment to a destination of communication as taught by Wang in order to keep identification data related to the user secure within the device, enhancing confidentiality and security (Wang, col. 5, lines 33-39; col. 6, lines 32-48). This is obviously a desirable

improvement over Ritter alone, which teaches directly transmitting the identification data to the destination of communication (col. 5, lines 9-18).

Ritter also does not explicitly disclose a flash memory for storing reference biological information of said user. Ritter discloses storing the biometric keys (biological information on a SIM-card, which is inserted into a communication device (col. 1, lines 46-49). Page 10, first paragraph of the specification recites, “This portable communication device is identical with conventional ones in having an antenna 601, a transmission and reception circuit 602, a signal processing circuit 603 to compress, expand and encode signals, a microcomputer 604 for control, a flash memory 605, a keyboard 606, a voice input circuit 607, voice output circuit 608, a microphone 609, a speaker 610 and, in addition, this device further has a sensor- incorporated display 611, a checking circuit part 612, etc.” However, Wang further discloses the storage of identification data in flash memory (col. 9, lines 50-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the communication device taught by Ritter to alternatively store the reference biological information in flash memory instead of a SIM-card. One would have been motivated to use flash memory because it is suitable for long time saving, with no power required for storage, and can be expanded (via replacement or additional cards) to store larger amounts of data.

Regarding claims 7 and 57, Ritter discloses a system for identifying an individual and a portable information device (col. 4, lines 16-27), comprising: a display device (column 4, line 25-32); means for checking read biological information with reference biological information (column 4, line 32-52); and means for transmitting information about the matching to a destination of communication (col. 5, lines 9-48) only when the read biological information has

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matched the reference biological information (col. 4, lines 40-48, Ritter teaches if the biometrics are not authenticated, usage may be prevented such as turning the phone off.); and a means for notifying said user (provide client and operator with instructions via user interface) that communication between said user and said destination of communication has been authorized after said destination of communication receives the information (column 4, line 32-52; column 5, line 9-33).

The Examiner notes that Ritter does not explicitly disclose notifying the user that communication has been authorized, but it is obvious if not inherent that the user is informed of the authentication decision. It would have been obvious to one of ordinary skill in the art at the time the invention was made to notify said user, after said destination of communication receives the information, that communication between said user and said destination of communication has been authorized in order to inform the user whether or not communication has been authorized so that the user may take appropriate action.

Ritter does not disclose the display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user or the light-emitting element comprises a cathode, a light emitting layer and an anode. Ritter does not explicitly disclose judging legitimacy of the user by checking read biological information with the reference biological information; or transmitting information about the judgment to a destination of communication. Ritter also does not disclose a flash memory for storing reference biological information of said user. Arguments analogous to those presented above for claims 1 and 51 are applicable to claims 7 and 57.

Regarding claims 35 and 85, Ritter discloses a system for identifying an individual and a portable information device (col. 4, lines 16-27), comprising: a display device (column 4, line 25-32); means for checking read biological information with reference biological information (column 4, line 32-52); and means for transmitting information about the matching to a destination of communication through the Internet (col. 5, lines 9-48; col. 6, lines 1-15) only when the read biological information has matched the reference biological information (col. 4, lines 40-48, Ritter teaches if the biometrics are not authenticated, usage may be prevented such as turning the phone off.); and a means for notifying said user (provide client and operator with instructions via user interface) that communication between said user and said destination of communication has been authorized after said destination of communication receives the information (column 4, line 32-52; column 5, line 9-33).

Ritter does not disclose the display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user (means for reading biological information of a user by means of said sensor-incorporated display) or the light emitting element comprises a cathode, a light emitting layer and an anode. Ritter does not explicitly disclose judging legitimacy of the user by checking read biological information with the reference biological information; or transmitting information about the judgment to a destination of communication. Ritter also does not disclose a flash memory for storing reference biological information of said user. Arguments analogous to those presented above for claims 1 and 51 are applicable to claim 35 and 85.

Regarding claims 43 and 93, Ritter discloses a system for identifying an individual and a portable information device (col. 4, lines 16-27), comprising: a display device (column 4, line

25-32); means for checking read biological information with reference biological information (column 4, line 32-52); and means for transmitting information about the matching to a destination of communication through the Internet (col. 5, lines 9-48; col. 6, lines 1-15) only when the read biological information has matched the reference biological information (col. 4, lines 40-48, Ritter teaches if the biometrics are not authenticated, usage may be prevented such as turning the phone off.); and a means for notifying said user (provide client and operator with instructions via user interface) that communication between said user and said destination of communication has been authorized after said destination of communication receives the information (column 4, line 32-52; column 5, line 9-33; see above discussion of claims 7 and 57).

Ritter does not disclose the display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user or the light-emitting element comprises a cathode, a light emitting layer and an anode. Ritter does not explicitly disclose judging legitimacy of the user by checking read biological information with the reference biological information; or transmitting information about the judgment to a destination of communication. Ritter also does not disclose a flash memory for storing reference biological information of said user. Arguments analogous to those presented above for claims 1 and 51 are applicable to claim 43 and 93.

Regarding claims 2, 8, 52 and 58, Ritter discloses that said biological information of said user is a palm pattern or a fingerprint (column 2, line 52-61).

Regarding claims 3, 9, 53 and 59, neither Ritter nor Harkin explicitly disclose that said biological information of said user is a pattern of a part of the palm of the user. The examiner

takes Official Notice that palm imaging is well known in the art of biometrics. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a pattern of a part of the palm as said biological information in order to identify the user based on the pattern of the palm.

Regarding claims 6, 12, 38, 46, 56, 62, 88 and 96, Harkin discloses the sensor comprises a contact type area sensor (column 5, line 54-column 6, line 23, line 58-column 7, line 10).

Claims 109-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ritter, Harkin and Wang as applied to claims 1, 7, 35, 43, 51, 57, 85 and 93 above, and further in view of US 6,040,810 to Nishimura (a reference of record).

Regarding claims 109-116, Ritter, Harkin and Wang do not disclose the sensor for reading biological information is a photodiode. Ritter teaches a video sensor (col. 4, lines 19) for obtaining the body features. Harkin teaches other optical sensors being incorporated into the device but does not explicitly disclose the sensor for reading the biological information is a photodiode (col. 8, lines 45-61). The sensor for reading biological information taught by Harkin is a capacitive contact type sensor. However, Nishimura teaches a display device having pixels, each of which includes a light emitting element and a sensor that is a photodiode (Fig. 1; col. 4, lines 23-31; col. 5, lines 55-65; col. 9, lines 23-29).

The teachings of Ritter, Harkin, Wang and Nishimura are combinable because they are all concerned with portable devices with incorporated sensors. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the device taught by the combination of Ritter, Harkin and Wang could be modified to include a sensor comprising a

photodiode as taught by Nishimura because the display device taught by Nishimura makes it possible to perform imaging in the same region as the displaying (Nishimura, col. 5, lines 55-65) without deteriorating display quality (col. 2, lines 13-18).

(10) Response to Argument

Appellant argues “Harkin does not describe or suggest a display device having pixels, each of which includes a light emitting element.” Appellant’s entire argument relies on Harkin’s exemplary disclosure of a liquid crystal (LC) display device, identifying the LC display device requires an ambient light source or a backlight.

Examiner respectfully disagrees that Harkin fails to describe or suggest a display device having pixels, each of which includes a light emitting element. While Examiner agrees that Harkin does disclose a liquid crystal display which relies on an ambient light source or backlight, Harkin also discloses in column 9, lines 64-67, that “[a]lthough an LC display device is used in this example, other types of display devices, comprising other kinds of electro-optical materials, for example electroluminescent or electrochromatic display services, could be employed instead.”

Examiner clearly indicated, when addressing the limitation “the light emitting elements comprises a cathode, a light emitting layer, and an anode,” recited in claim 1, in the Final Office Action mailed May 25, 2007 (page 4, lines 15-17) and in the Non-Final Office Action mailed December 13, 2006 (page 3, lines 13-16) that Harkin also disclosed an electroluminescent display.

Appellant's arguments with regard to the inherency of the light emitting element comprises a cathode, a light emitting layer, and an anode are directed toward the LC display, not the electroluminescent display as presented in the Office Action. Appellant is neither presently nor has previously contested the Examiner's assertion that an electroluminescent display inherently comprises a cathode, a light emitting layer, and an anode as presented in the Final Office Action. Examiner submits US 5,550,066 to Tang et al. as evidence that a light emitting element of an electroluminescent display inherently comprises a cathode, a light emitting layer, and an anode. Figure 3 of Tang et al. shows the construction of the electroluminescent device. Electrode material 72 serves as the anode (col. 7, lines 25-29), layer 82 is the light emitting (electroluminescent) layer (col. 7, line 45 - col. 8, line 19), and layer 84 is the cathode (col. 9, line 58 - col. 10, line 25).

Examiner has clearly shown Harkin discloses the display device may be an electroluminescent display and is not limited to the liquid crystal (LC) device as argued by Appellant. Examiner has provided evidence that an electroluminescent display comprises pixels, each of which include a light emitting element, the light emitting element comprises a cathode, a light emitting layer and an anode. Therefore, the Examiner's assertion of inherency was proper. Harkin therefore discloses a display device having pixels, each of which includes a light emitting element and a sensor for reading biological information of a user as recited in independent claims 1, 7, 35, 43, 51, 57, 85 and 93.

Given that all elements of the claims contested by the Appellant are found in the prior art, and given that it would have been obvious to one of ordinary skill in the art at the time of

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invention to combine the elements as discussed in the grounds of rejection above, the Examiner respectfully requests the Board of Patent Appeals and Interferences to uphold the rejection.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Anthony Mackowey/

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